

ELEMENT SUMMARY INFORMATION

Element: 5.1.9 Reduced Vertical Separation Minimum (RVSM) Authorization

Purpose of this Element (Air Carrier's responsibility): To ensure continuous altitude reliability in accordance with the Air Carrier's RVSM authorization.

Objective (FAA responsibility): To determine if the air carrier's RVSM process includes safety attributes.

Inputs:

- Operations Specifications
- Special Use Airspace
- Air Traffic Control (ATC)
- RVSM-Qualified Aircraft
- Dispatchers/Flight Followers
- Flight Crew

Output:

• RSVM operations are conducted in accordance with the Air Carrier's RVSM authorization

Performance Measures:

- RVSM operations are conducted in accordance with the Air Carrier's RVSM authorization.
- All airplanes remain within the allowable altimetry error.

SRR:

- 14 CFR 91.706: "Operations within Airspace Designed as Reduced Vertical Separation Minimum (RVSM) Airspace."
- 14 CFR 91, Appendix G, "Operations in Reduced Vertical Separation Minimum (RVSM) Airspace"

Other CFRs and/or FAA Guidance:

- HBAT 99-11A "Approval of Aircraft and Operators for Flight in Airspace Above Flight Level 290 Where 1,000 Foot Vertical Separation is Applied"
- AC-91-RVSM "Approval of Aircraft and Operators for Flight in Airspace Above Flight Level (FL) 290 Where 1,000 Foot Vertical Separation is Applied"
- HBAT 00-03 NAT/MNPS and RVSM airspace flight level changes to the operations specifications, B039 and B046
- HBAW 00-04 NAT/MNPS and RVSM airspace flight level changes to the operations specifications, B039 and B046

SRR SPECIFIC INFORMATION

SRR	Intent	Inspectors
91.706 (a)	To specify the requirements for operations	Certification: ASI
	within RVSM.	Surveillance: ASI
91, App. G	TBD	Certification: ASI
		Surveillance: ASI

5.1.9 Reduced Vertical Separation Minimum (RVSM) Authorization				
SECTION 1 - RESPONSIBILITY ATTRIBUTE				
	Objective: To determine if there is a clearly identifiable, qualified, and knowledgeable person who is accountable for the quality of the RVSM process.			
To meet this objective, the inspecto	r will accomplish the following tasks:			
1. Identify the person who is responsible (RVSM) Authorization process	onsible for the quality of the Reduced Ver	rtical Separ	ration Minimum	
2. Review the description in the M	fanual that delineates the duties and response	onsibilities	of the person.	
3. Evaluate the person's qualificat	ions and work experience (or resume', if	appropriate	e).	
4. Review the appropriate organiz	ational chart.		,	
5. Discuss the Reduced Vertical S	eparation Minimum (RVSM) Authorizati	ion process	with the person.	
To meet this objective, the inspecto	r will answer the following questions:			
	erson who is answerable for the quality tion Minimum (RVSM) Authorization	YES name:	If yes, provide the	
2. Does the person understand the Reduced Vertical Separation M process?	inimum (RVSM) Authorization	YES NO	If no, explain:	
	controls associated with the Reduced RVSM) Authorization process?	☐ YES ☐ NO	If no, explain:	
1	interfaces associated with the Reduced RVSM) Authorization process?	☐ YES ☐ NO	If no, explain:	
the Reduced Vertical Separation process?	process measurements associated with n Minimum (RVSM) Authorization	☐ YES ☐ NO	If no, explain:	
6. Is the responsibility of this posi carrier's Manual(s)?	tion clearly documented in the air	☐ YES ☐ NO	If no, explain:	
7. Are the qualification standards	for this position clearly documented?	☐ YES ☐ NO	If no, explain:	
7a Are the qualification standards duties that are assigned?	for this position appropriate for the	☐ YES ☐ NO	If no, explain:	
8. Does the person meet the qualit	ication standards?	YES NO	If no, explain:	
Reduced Vertical Separation M process?	hat he/she has responsibility for the inimum (RVSM) Authorization	☐ YES ☐ NO	If no, explain:	
	authority to establish and modify the inimum (RVSM) Authorization	☐ YES ☐ NO	If no, explain:	

5.1.9 Reduced Vertical Separation Minimum (RVSM) Authorization			
SECTION 2 – AUTHORITY ATTRIBUTE			
Objective: To determine if there is a clearly identifiable, qualified, and knowledgeable person with the authority to establish and modify the RVSM process.			
To meet this objective, the inspector will accomplish the following tasks:			
1. Identify the person who has the authority to establish or modify the Red Minimum (RVSM) Authorization process.	uced Vertical Separation		
2. Review the description in the Manual that delineates the duties and response	onsibilities of the person.		
3. Evaluate the person's qualifications and work experience (or resume', if	appropriate).		
4. Review the appropriate organizational chart.			
5. Discuss the Reduced Vertical Separation Minimum (RVSM) Authorizat	ion process with the person.		
To meet this objective, the inspector will answer the following questions:			
1. Is there a clearly identifiable person who has authority to establish and modify the air carrier's policies for the Reduced Vertical Separation Minimum (RVSM) Authorization process?	YES If yes, provide the name: No If no, explain:		
2. Does the person understand the procedures associated with the Reduced Vertical Separation Minimum (RVSM) Authorization process?			
3. Does the person understand the controls associated with the Reduced Vertical Separation Minimum (RVSM) Authorization process?	YES If no, explain:		
4. Does the person understand the interfaces associated with the Reduced Vertical Separation Minimum (RVSM) Authorization process?	YES If no, explain:		
5. Does the person understand the process measurements associated with the Reduced Vertical Separation Minimum (RVSM) Authorization process?	YES If no, explain:		
6. Is the authority of this position clearly documented in the air carrier's Manual(s)?	YES If no, explain:		
7. Are the qualification standards for this position clearly documented?	YES If no, explain:		
7a Are the qualification standards for this position appropriate for the duties that are assigned?	YES If no, explain:		
8. Does the person meet the qualification standards?	YES If no, explain:		
9. Does the person acknowledge that he/she has authority for the Reduced Vertical Separation Minimum (RVSM) Authorization process?	YES If no, explain:		
10. Does the individual know who has the responsibility for the Reduced Vertical Separation Minimum (RVSM) Authorization process?	YES If no, explain:		
11. Are the procedures for delegation of authority clearly documented for the Reduced Vertical Separation Minimum (RVSM) Authorization process?	YES If no, explain:		

5.1.9 Reduced Vertical Separation Minimum (RVSM) Authorization		
SECTION 3 – PROCEDURES ATTRIBUTE		
Objective: To determine if the air carrier has documented procedures for process.	accomplishing the RVSM	
To meet this objective, the inspector will accomplish the following tasks:		
1. Review the documented instructions and information related to the Re Minimum (RVSM) Authorization process to ensure that they contain how.		
2. Review the FAA Guidance and Specific Regulatory Requirements (SI supplemental information section of this SAI.	RR) included in the	
3. Discuss the Reduced Vertical Separation Minimum (RVSM) Authorize personnel to gain an understanding of the procedures.	zation process with appropriate	
4. Observe the Reduced Vertical Separation Minimum (RVSM) Authori understanding of the procedures.	zation process to gain an	
To meet this objective, the inspector will answer the following questions:		
1. Do written procedures exist to achieve the desired result of the Reduce Minimum (RVSM) Authorization process:	ed Vertical Separation	
1.1 Do written procedures exist to ensure that only RVSM crews are assigned to RVSM operations?	☐ YES If no, explain: ☐ NO	
1.2 Do written procedures exist to ensure that only RVSM qualified dispatchers are assigned to RVSM operations?	☐ YES If no or N/A, explain: ☐ NO ☐ N/A	
1.3 Do written procedures exist to ensure that only RVSM trained flight followers are assigned to RVSM operations?	☐ YES If no or N/A, explain: ☐ NO ☐ N/A	
1.4 Do written procedures exist to ensure that only RVSM airplanes are assigned to RVSM operations?	YES If no, explain:	
1.5 Do written procedures exist to identify all actions that the aircrew must accomplish prior to and after entering RVSM airspace?	☐ YES If no, explain: ☐ NO	
1.6 Do written procedures exist to determine that airplanes continue to meet RVSM altimeter tolerances while in RVSM airspace?	YES If no, explain: No	
1.7 Do written procedures exist to notify ATC when an airplane is no longer able to comply with RVSM requirements?	YES If no, explain:	
1.8 Do written procedures exist to record instances in which an airplane was no longer able to comply with RVSM requirements?	☐ YES If no, explain: ☐ NO	
2. Do the procedures identify: who, what, where, when and how?	YES If no, explain:	
3. Are the procedures in compliance with the CFR(s)?	☐ YES If no, explain: ☐ NO	

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SECTION 3 – PROCEDURES ATTRIBUTE				
	Do the procedures conform to other written guidance (E.g., Operations Specifications, FAA Orders, Airworthiness Directives, Advisory Circulars, Handbook Bulletins, Directives, and Manufacturer's Recommendations)?		YES NO	If no, explain:
	Does the air carrier have the resources to support the written procedures for the Reduced Vertical Separation Minimum (RVSM) Authorization process?		YES No	If no, explain:
	If alternate procedures exist for use during irregular conditions, do they achieve the same desired results as the primary procedures so that an equivalent level of safety is maintained? (E.g., a manual system used as a result of equipment failure).			If no, explain: No alternate procedures for this element
7.	Are the procedures published in different manuals relating to the Reduced Vertical Separation Minimum (RVSM) Authorization process consistent?		YES No	If no, explain:
	Does the air carrier have a documented method for assessing the impacts of procedural changes to the Reduced Vertical Separation Minimum (RVSM) Authorization process?		YES No	If no, explain:

5.1.9 Reduced Vertical Separation Minimum (RVSM) Authorization			
SECTION 4 – CONTROL ATTRIBUTE			
Objective: To determine if checks and restraints are designed into the RVSM process to ensure a desired result is achieved.			
To meet this objective, the inspector will accomplish the following tasks:			
1. Review the documented instructions and information related to the R Minimum (RVSM) Authorization process.	Reduced Vertical Separation		
2. Review the FAA Guidance and Specific Regulatory Requirements (S supplemental information section of this SAI	SRR) included in the		
3. Discuss the Reduced Vertical Separation Minimum (RVSM) Author personnel to gain an understanding of the controls.	ization process with appropriate		
Observe the Reduced Vertical Separation Minimum (RVSM) Author understanding of the controls.	rization process to gain an		
To meet this objective, the inspector will answer the following questions.	:		
Are the following checks and restraints built into the Reduced Vertic (RVSM) Authorization process:	al Separation Minimum		
1.1 Is there a system in place that prevents non-RVSM qualified crewmembers from being assigned to RVSM operations?	YES If no, explain:		
1.2 Is there a system in place that prevents non-RVSM qualified dispatchers from being assigned to RVSM operations?	☐ YES If no or N/A, explain: ☐ NO ☐ N/A		
1.3 Is there a system in place that prevents non-RVSM trained flight followers from being assigned to RVSM operations?	☐ YES If no or N/A, explain: ☐ NO ☐ N/A		
1.4 Is there a system in place that prevents non-RVSM airplanes from being assigned to RVSM operations?	☐ YES If no, explain: ☐ NO		
1.5 Is there a system in place that verifies the beginning of an RVSM route segment?	☐ YES If no, explain: ☐ NO		
1.6 Is there a system in place to verify that the airplane continues to meet RVSM equipment requirements prior to initiating an RVSM route segment?	☐ YES If no, explain: ☐ NO		
1.7 Is there a system in place to verify that enroute alternate airports remain suitable prior to entering an RVSM route segment?	☐ YES If no, explain: ☐ NO		
1.8 Is there a system in place to verify that the Air Carrier complies with RVSM expanded reporting requirements?	☐ YES If no, explain: ☐ NO		
2. Do the checks and restraints ensure the desired result is achieved for the Reduced Vertical Separation Minimum (RVSM) Authorization process?	☐ YES If no, explain: ☐ NO		

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SECTION 4 – CONTROL ATTRIBUTE				
3.	Does the air carrier have a documented method for assessing the impacts of any changes made to checks and restraints in the Reduced Vertical Separation Minimum (RVSM) Authorization process?	☐ YES ☐ NO	If no, explain:	
4.	Does the air carrier have the resources to support the checks and restraints for the Reduced Vertical Separation Minimum (RVSM) Authorization process?	☐ YES ☐ NO	If no, explain:	

5.1.9 Reduced Vertical Separation Minimum (RVSM) Authorization			
SECTION 5 - PROCESS MEASUREMENT ATTRIBUTE			
Objective: To determine if the air carrier measures and assesses the RVSM Program, to identify and correct problems or potential problems.			
To meet this objective, the inspector will accomplish the following tasks	:		
1. Review the documented instructions and information related to the I Minimum (RVSM) Authorization process.	Reduced Vertical Separation		
2. Discuss the Reduced Vertical Separation Minimum (RVSM) Author personnel to gain an understanding of the process measures.	rization process with appropriate		
3. Observe the Reduced Vertical Separation Minimum (RVSM) Authounderstanding of the process measures.	rization process to gain an		
To meet this objective, the inspector will answer the following questions	y:		
1. <deleted></deleted>			
2. Does the air carrier's Reduced Vertical Separation Minimum (RVS) include the following process measurements?	M) Authorization process		
2.1 Does the Air Carrier record when an attempt was made to assign non-qualified crewmembers to RVSM operations?	☐ YES If no, explain: ☐ NO		
2.2 Does the Air Carrier record when an attempt was made to assign non-qualified dispatchers to RVSM operations?	☐ YES If no or N/A, explain: ☐ NO ☐ N/A SUPPLEMENTAL		
2.3 Does the Air Carrier record when an attempt was made to assign untrained flight followers to RVSM operations?	☐ YES If no or N/A, explain: ☐ NO ☐ N/A DOMESTIC & FLAG		
2.4 Does the Air Carrier record when an attempt was made to assign non-RVSM airplanes to RVSM operations?	☐ YES If no, explain: ☐ NO		
2.5 Does the Air Carrier's voluntary disclosure program provide for reporting instances of non-compliance with their RVSM authorization?	☐ YES If no or N/A, explain: ☐ NO ☐ N/A		
3. Does the air carrier document their process measurement methods and results?	YES If no, explain:		
4. Are the air carrier's process measurement methods effective?	YES If no, explain:		
5. Does the air carrier use their process measurement results to improve their programs?	YES If no, explain:		
6. Are the process measurement results accessible to the FAA?	YES If no, explain:		
7. Does the organization that conducts the process measurement have direct access to the person with responsibility for the Reduced Vertical Separation Minimum (RVSM) Authorization process?	☐ YES If no, explain: ☐ NO		

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S	ECTION 5 - PROCESS MEASUREMENT ATTRIBUTE	=	
8.	Does the air carrier have the resources to support the process measurement for the Reduced Vertical Separation Minimum	☐ YES ☐ NO	If no, explain:
	(RVSM) Authorization process?		

5.1.9 Reduced Vertical Separation Minimum (RVSM) Authorization			
SECTION 6 – INTERFACES ATTRIBUTE Objective: To determine if the air carrier identifies and manages the interactions between the RVSM process and the other element processes within the air carrier organization.			
To meet this objective, the inspector will accomplish the following tasks:			
1. Review the documented instructions and information related to the Re Minimum (RVSM) Authorization process.	duced Ver	rtical Separation	
2. Discuss the Reduced Vertical Separation Minimum (RVSM) Authorize personnel to gain an understanding of the interfaces.	zation proc	eess with appropriate	
3. Observe the Reduced Vertical Separation Minimum (RVSM) Authori understanding of the interfaces.	zation pro	cess to gain an	
To meet this objective, the inspector will answer the following questions:			
1. Are the following interfaces identified for the Reduced Vertical Separ Authorization process:	ation Mini	imum (RVSM)	
1.1 Aircraft Airworthiness Requirements (Element 1.1.1)	☐ YES ☐ NO	If no, explain:	
1.2 Appropriate Operational Equipment (Element 1.1.3)	YES NO	If no, explain:	
1.3 Airworthiness Release or Log Book Entry (Element 1.2.1)	☐ YES ☐ NO	If no, explain:	
1.4 Maintenance Log/Recording Requirements (Element 1.2.3)	YES NO	If no, explain:	
1.5 Mechanical Interruption Summary (MIS) Reports (Element 1.2.4)	YES NO	If no, explain:	
1.6 Mechanical Reliability Reports (MRR) (Element 1.2.5)	YES NO	If no, explain:	
1.7 Maintenance Program (Element 1.3.1)	YES NO	If no, explain:	
1.8 Inspection Program (Element 1.3.2)	YES NO	If no, explain:	
1.9 Required Inspection Item (RII) (Element 1.3.4)	☐ YES ☐ NO	If no, explain:	
1.10 MEL/CDL/Deferred Maintenance (Element 1.3.5)	☐ YES ☐ NO	If no, explain:	
1.11 AD Management (Element 1.3.6)	☐ YES ☐ NO	If no, explain:	
1.12 Outsource Organization (Element 1.3.7)	☐ YES ☐ NO	If no, explain:	
1.13 Parts/Material Control/SUP (Element 1.3.10)	U YES NO	If no, explain:	

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SECTION 6 – INTERFACES ATTRIBUTE			
1.14 Continuous Analysis and Surveillance (CAS) (Element 1.3.11)	YES If no, explain:		
1.15 GMM/Equivalent (Element 1.3.14)	YES If no, explain:		
1.16 Reliability Program (Element 1.3.15)	YES If no, explain:		
1.17 Reduced Vertical Separation Minimum (RVSM) (Element 5.1.9)	YES If no, explain:		
1.18 Manual(s) (System 2.0)	YES If no, explain:		
1.19 Airman Duties/Flight Deck Procedures (Element 3.1.3)	YES If no, explain:		
1.20 Operational Control (Element 3.1.4)	YES If no, explain:		
1.21 Aircraft Performance Operating Limitations (Element 3.1.9)	YES If no, explain:		
1.22 Special Navigation Areas of Operation (Element 5.1.7)	YES If no, explain:		
1.23 Safety Program (Ground and Flight) (Element 7.2.1)	YES If no, explain:		
1.24 Dispatch or Flight Release (Element 3.2.1)	YES If no, explain:		
1.25 MEL/CDL Procedures (Element 3.2.3)	YES If no, explain:		
1.26 Personnel Training and Personnel Qualifications (System 4.0)			
1.27 Route Structures (System 5.0)	YES If no, explain:		
1.28 Technical Administration (System 7.0)	YES If no, explain:		
2. List any additional interfaces identified:			
3. Are there written procedures for the use of air carrier personnel in the application of these interfaces?	YES If no, explain:		
4. Are there controls to ensure that interfaces occur?	YES If no, explain:		
5. Are the interfaces between the Reduced Vertical Separation Minimum (RVSM) Authorization process and other processes treated consistently in the Manual(s)?	YES If no, explain:		